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# New species of *Agathidium* Panzer from China (Coleoptera, Leiodidae, Agathidiini)

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New species of Agathidium Panzer from China (Coleoptera, Leiodidae, Agathidiini). - Records and/or descriptions are given for 13 species of Agathidium from China (Sichuan), deposited in the Geneva Museum and collected by Dr. S. Kurbatov. New species are: Agathidium (Agathidium) modestum sp. n., A. (A.) armatum sp. n., A. (A.) rubiginosum sp. n., A. (A.) hani sp. n., A. (A.) luojiense sp. n., A. (A.) pseudouniforme sp. n., A. (Microceble) xilingense sp. n., A. (Macroceble) kurbatovianum sp. n., A. (M.) megacephalmm sp. n. New records for Sichuan are: Agathidium (Agathidium) dagathidium) brunneipenne Ang. & Dmz. and A. (A.) lugubre Ang. & Dmz.

**Key-words:** Coleoptera - Leiodidae - *Agathidium* - China - new species - new records.

#### INTRODUCTION

A large amount of new data on the *Agathidium* fauna of China results from a study of the material deposited in the Geneva Museum. The collection treated consists of 102 specimens and 13 species collected in 4 localities of the Sichuan Province.

The new data concern:

a) 9 new species.

b) 2 new records for Sichuan: *Agathidium (Agathidium) brunneipenne* Ang. & Dmz. and *A*. (*A*.) cf. *lugubre* Ang. & Dmz.

The Chinese Agathidiini are moderately known. With the new species are known 80 species, collected mainly in Sichuan, Yunnan and Zhejiang Province. The majority of species are endemic; only 6 specie are present in Taiwan or Oriental Region.

The specimens are deposited in the Geneva Museum (MHNG) and in Angelini's collection in Genoa Natural History Museum (AC-GNHM). For methods see ANGELINI & DE MARZO (1981: 188-192).

I am indebted to Dr Ivan Löbl for making the material available for study and to Jonathan Cooter (Hereford) for comments on the earlier version of the manuscript.

### Agathidium Panzer, 1797

### Agathidium (Neoceble) dundai Ang. & Svec

Agathidium (Neoceble) dundai Angelini & Svec, 1994: 12.

Material: China, Sichuan, Xiling Mt., 1600-2400 m, 30. VII-4.<br/>VIII.1996, leg. S. Kurbatov, l ex.  $\heartsuit$  in MHNG.

Distribution: China (Sichuan).

#### Agathidium (Agathidium) modestum sp. n.

Holotype <br/>ở: China, Sichuan, env. Xichang, M. Luoji, 2300-2400 m, 16-24. VII.<br/>1996, leg. S. Kurbatov, in MHNG.

Paratypes: Same data as holotype, 7  $\circ$  and 8  $\circ$  in MHNG, 3  $\circ$  and 2  $\circ$  in AC-GNHM.

Length 2,6-3,0 mm (holotype  $\delta$  2,90 mm). Dorsum reddish-brown, venter lighter; antennae uniformly testaceous; legs reddish-brown. Microreticulation absent; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Punctures very small, superficial, separated from each other by 2-10 times their own diameter. Widest at the eyes; eyes flattened (fig. 1); antero-lateral margins distinctly raised; clypeus moderately emarginate; clypeal line absent. 3rd antennal segment 1,27 times as long as 2nd and shorter than 4th + 5th together.

Pronotum: Punctures as those on head, separated from each other by 2-15 times their own diameter. 1,59 times as broad as head, moderately broader than long (width/length= 1,55) and very convex (width/height= 1,4); anterior margin weakly curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 0,90 mm, width 1,40 mm and height 1,00 mm.

Elytra: Punctures as those on head, separated from each other by 2-5 times their own diameter. As broad as pronotum, a little broader than long (width/length= 1,03) and moderately convex (width/height= 1,79); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,35 mm, width 1,40 mm and height 0,78 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines complete, a small tubercle present between the metacoxae; metasternum short, meso- and metacoxae almost touching.

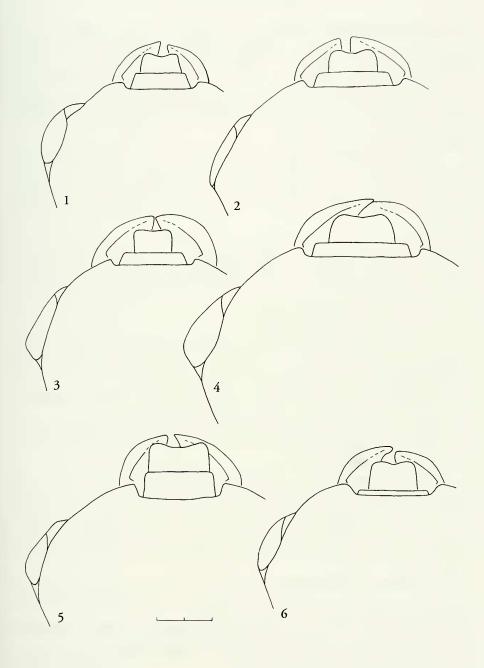
Legs: Male hind femora curved at posterior margin (fig. 16). Tarsal formula: 35-5-4, 94-4-4.

Aedeagus as in figures 7. 8. Spermatheca as in figure 9.

Discussion: Species of the *madurense* group; *Agathidium modestum* sp. n. is similar to *A. alesi* Ang. & Dmz. (from Taiwan) and *A. distinguendum* Ang. & Dmz. (from Taiwan); from *A. distinguendum* it differs in shape of eyes, greater length, and in having the pronotum less transverse; from *A. alesi* it differs only in shape of pronotum, which is less transverse and male hind femora, without tooth at posterior margin.

Distribution: China (Sichuan).

Figs 1, 7-9, 16



FIGS 1-6

Head of: 1, Agathidium modestum sp. n.; 2, A. armatum sp. n.; 3, A. rubiginosum sp. n.; 4, A. hani sp. n.; 5, A. luojiense sp. n.; 6, A. pseudouniforme sp. n.

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#### Agathidium (Agathidium) armatum sp. n.

Holotype &: China, Sichuan, M. Xiling, 1600-2400 m, 30.VII.-4.VIII.1996, leg. S. Kurbatov, in MHNG.

Paratypes: Same data as holotype, 2  $\circ$  and 5  $\circ$  in MHNG, 2  $\circ$  and 1  $\circ$  in AC-GNHM.

Length 2,85-3,10 mm (holotype  $\delta$  3,00 mm). Dorsum reddish-brown, venter lighter; antennae uniformly testaceous; legs reddish-brown. Microreticulation present only on the elytra, impressed; puncturation fine and sparse on head and pronotum, absent on elytra. Sutural striae absent.

Head: Microreticulation absent; punctures small, impressed, separated from each other by 2-5 times their own diameter. Widest at the eyes; eyes flattened (fig. 2); antero-lateral margins uniformly raised; clypeus moderately emarginate; clypeal line absent. 3rd antennal segment 2,36 times as long as 2nd and longer than 4th + 5th together.

Pronotum: Microreticulation absent; punctures smaller and more superficial than those on the head, hardly visible, separated from each other by 2-10 times their own diameter. 1,33 times as broad as head, moderately broader than long (width/ length= 1,47) and moderately convex (width/height= 1,47); anterior margin moderately curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 0,95 mm, width 1,40 mm and height 0,95 mm.

Elytra: Microreticulation impressed and uniform; without pucturation. Slightly narrower than the pronotum, as broad as long and weakly convex (width/height= 1,87); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,35 mm, width 1,35 mm and height 0,72 mm.

Metathoracic wings absent. Meso- and metasternum: median carina sharp, lateral lines absent, femoral lines complete, rounded at middle.

Legs: Male hind femora with a sharp tooth at the posterior margin (fig. 17). Tarsal formula:  $\eth$  5-5-4,  $\updownarrow$  5-4-4.

Aedeagus as in figures 10, 11. Spermatheca as in figure 12.

Discussion: Species of the *laevigatum* group; *Agathidium armatum* sp. n. is similar to *A. rubiginosum* sp. n. (from Sichuan) and *A. rufescens* Ang. & Dmz. (from Sichuan) in colouring of dorsum, length ratio 3rd/2nd and in microreticulation only on elytra; it differs in shape of eyes, very long and flattened. The male and female genitalia also exhibit marked differences and reference to these is necessary for precise determination.

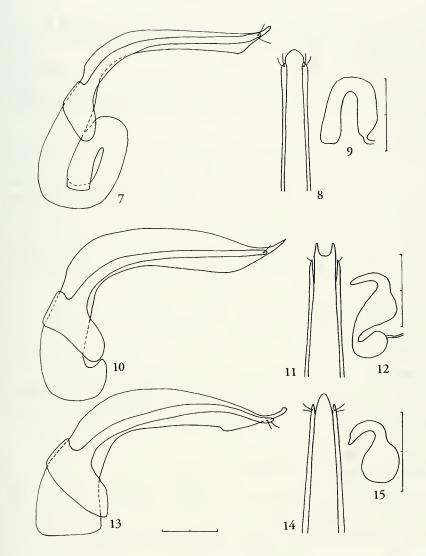
Distribution: China (Sichuan).

## Agathidium (Agathidium) procerum Ang. & Dmz.

Agathidium (Agathidium) procerum Angelini & De Marzo, 1998: 359.

Material: China, Sichuan, Mt. Xiling, 1600-2400 m, 30.VII.-4.VIII.1996, leg. S. Kurbatov, 5 ex. in MHNG and AC-GNHM.

Distribution: China (Sichuan).



FIGs 7-15

Aedeagus (lateral and dorsal view of its apex) and spermatheca of: 7-9, Agathidium modestum sp. n.; 10-12, A. armatum sp. n.; 13-15, A. rubiginosum sp. n.

### Agathidium (Agathidium) rubiginosum sp. n.

Holotype &: China, Sichuan, Mt. Xiling, 1600-2400 m, 30.VII.-4.VIII.1996, leg. S.Kurbatov, in MHNG.

Paratypes: Same data as holotype, 1  $\delta$  in MHNG, 1  $\delta$  and 1  $\Im$  in AC-GNHM.

Length 3,05-3,15 mm (holotype & 3,15 mm). Dorsum reddish-brown; mesosternum testaceous, metasternum reddish-brown; antennae uniformly testaceous; legs

Figs 3, 13-15, 18

reddish-brown. Microreticulation present only on the elytra, superficial, more impressed on female; puncturation fine and sparse on head and pronotum, absent on elytra. Sutural striae absent.

Head: Microreticulation absent: punctures small, superficial, separated from each other by 2-6 times their own diameter. Widest at the eyes; eyes flattened (fig. 3); antero-lateral margins uniformly raised; clypeus slightly emarginate; clypeal line absent. 3rd antennal segment 2,4 times as long as 2nd and longer than 4th + 5th together.

Pronotum: Microreticulation absent; punctures smaller and more superficial than those on the head, separated from each other by 1-15 times their own diameter. 1,59 times as broad as head, moderately broader than long (width/length= 1,42) and moderately convex (width/height= 1,56); anterior margin sharply curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 1,05 mm, width 1,50 mm and height 0,96 mm.

Elytra: Microreticulation superficial and uniform; puncturation absent. Slightly narrower than the pronotum, as broad as long and weakly convex (width/height= 1,86); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,40 mm, width 1,40 mm and height 0,75 mm.

Metathoracic wings absent. Meso- and metasternum: median carina weak, lateral lines absent, femoral lines incomplete, rounded at middle.

Legs: Male hind femora with a sharp tooth at the posterior margin (fig.18). Tarsal formula: 35-5-4, 95-4-4.

Aedeagus as in figures 13, 14. Spermatheca as in figure 15.

Discussion: See *Agathidium armatum* sp. n.; from *A. rufescens* Ang. & Dmz. (from Sichuan) it differs in greater width ratio pronotum/head and in shape of pronotum, less transverse.

Distribution: China (Sichuan).

#### Agathidium (Agathidium) brunneipenne Ang. & Dmz.

Agathidium (Agathidium) brunneipenne Angelini & De Marzo, 1998: 363.

Material: China, Sichuan, Mt. Xiling, 1600-2400 m, 30. VII.-4.<br/>VIII.1996, leg. S. Kurbatov, 1  $\,^{\circ}\,$  in MHNG.

Distribution: China (Hubei, Sichuan). New record for Sichuan.

#### Agathidium (Agathidium) cf. lugubre Ang. & Dmz.

Agathidium (Agathidium) lugubre Angelini & De Marzo, 1998: 365.

Material: China, Sichuan, Mt. Xiling, 1600-2400 m, 30.VII.-4.VIII.1996, leg. S. Kurbatov, 3 in MHNG (tentative determination based on female specimens).

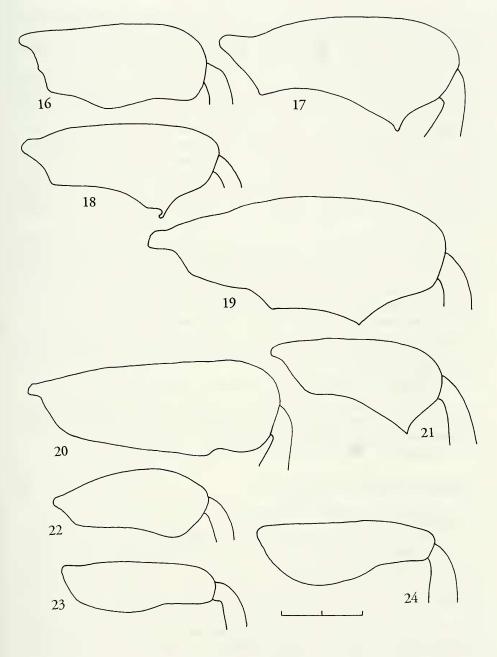
Distribution: China (Guangxi, Sichuan). New record for Sichuan.

### Agathidium (Agathidium) hani sp. n.

Holotype d: China, Sichuan, M. Emei, VII.1980, leg. Jäch in AC-GNHM.

Paratypes: China, Sichuan, Mt. Xiling, 1600-2400 m, 30.VII.-4.VIII.1996, leg. S. Kurbatov, 1  $\,$ ° in MHNG, 1  $\,$ ° in AC-GNHM.

Figs 4, 19, 25-27



FIGS 16-24

Male hind femora of: 16, Agathidium modestum sp. n.; 17, A. armatum sp. n.; 18, A. rubiginosum sp. n.; 19, A. hani sp. n.; 20, A. luojiense sp. n.; 21, A. pseudouniforme sp. n.; 22, A. xilingense sp. n.; 23, A. kurbatovianum sp. n.; 24, A. megacephalum sp. n.

Length 3,8-4,4 mm (holotype  $\delta$  4,40 mm). Dorsum dark reddish-brown, venter reddish-brown, mesosternum lighter; antennae uniformly testaceous; legs reddish-brown. Microreticulation almost absent, present only in traces on the elytra; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Punctures very small, superficial, separated from each other by 4-10 times their own diameter. Widest at the eyes; eyes flattened (fig. 4); antero-lateral margins uniformly raised; clypeus moderately emarginate; clypeal line absent. 3rd antennal segment 2 times as long as 2nd and longer than 4th + 5th together.

Pronotum: Punctures smaller and more superficial than those on the head, hardly visible, separated from each other by 4-15 times their own diameter. 1,62 times as broad as head, weakly broader than long (width/length= 1,34) and very convex (width/height= 1,43); anterior margin sharply curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 1,55 mm, width 2,08 mm and height 1,45 mm.

Elytra: Microreticulation present only in traces; punctures as on head but separated from each other by 1-5 times their own diameter; slightly narrower than the pronotum, a little longer than broad (width/length= 0,97) and weakly convex (width/height= 1,9); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,95 mm, width 1,90 mm and height 1,00 mm.

Metathoracic wings absent. Meso- and metasternum: median carina weak, lateral lines absent, femoral lines incomplete, rounded at middle.

Legs: Male hind femora with two tooth at the posterior margin (fig.19). Tarsal formula: 3 5-5-4, 9 5-4-4.

Aedeagus as in figures 25, 26. Spermatheca as in figure 27.

Discussion: Species of the *dentatum* group; *Agathidium hani* sp. n. is similar to *A. lugubre* Ang. & Dmz. (from Guangxi): it differs in shape of male hind femora, aedeagus and in greater width ratio pronotum/head.

Distribution: China (Sichuan).

## Agathidium (Agathidium) luojiense sp. n. Figs 5, 20, 28-30

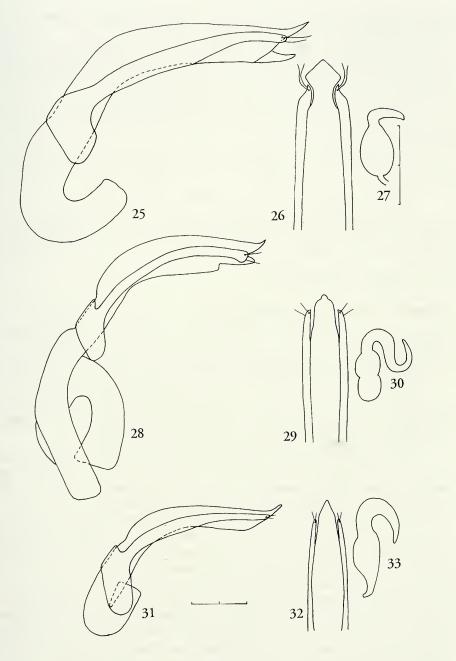
Holotype  $\mathcal{E}$ : China, Sichuan, Xichang, M. Luoji. 2300-2500 m, 16.-24.VII.1996, leg. S. Kurbatov, in MHNG.

Paratypes: Same data as holotype, 5  $\circ$  and 8  $\circ$  in MHNG, 2  $\circ$  and 2  $\circ$  in AC-GNHM.

Length 3,25-3,50 mm (holotype  $\delta$  3,45 mm). Dorsum reddish-brown; mesosternum reddish-brown, metasternum black; antennae uniformly testaceous; legs reddish-brown. Microreticulation almost absent, present only in traces on the elytra; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Punctures very small, superficial, separated from each other by 1-10 times their own diameter. Widest at the eyes; eyes flattened (fig. 5); antero-lateral margins uniformly raised; clypeus moderately emarginate: clypeal line absent. 3rd antennal segment 1.3 times as long as 2nd and as long as the 4th + 5th together.

Pronotum: Puncturation as that of head. 1,42 times as broad as head, moderately broader than long (width/length= 1,57) and very convex (width/height= 1,4); anterior





Aedeagus (lateral and dorsal view of its apex) and spermatheca of: 25-27, *Agathidium hani* sp. n.; 28-30, *A. luojiense* sp. n.; 31-33, *A. pseudouniforme* sp. n.

margin sharply curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 1,03 mm, width 1,62 mm and height 1,15 mm.

Elytra: Microreticulation almost absent, only traces; puncturation as that of head. As broad as pronotum, as broad as long and moderately convex (width/height= 1,8); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,62 mm, width 1,62 mm and height 0,90 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines short, rounded at middle; metasternum short, meso- and metacoxae almost touching.

Legs: Male hind femora curved at posterior margin (fig.20). Tarsal formula:  $\circ$  5-5-4,  $\circ$  5-4-4.

Aedeagus as in figures 28, 29. Spermatheca as in figure 30.

Discussion: Species of the *dentatum* group; *Agathidium luojiense* sp. n. is similar to *A. huaense* Ang. & Dmz. and *A. pseudouniforme* sp. n.; it differs only in lesser length ratio 3rd/2nd antennal segments, in shape of male hind femora and aedeagus.

Distribution: China (Sichuan).

#### Agathidium (Agathidium) pseudouniforme sp. n. Figs 6, 21, 31-33

Holotype ♂: China, Sichuan, Xichang, M. Luoji, 2300-2500 m, 16.-24.VII.1996, leg. S. Kurbatov, in MHNG.

Paratypes: Same data as holotype, 4  $\circ$  and 9  $\circ$  in MHNG, 3  $\circ$  and 2  $\circ$  in AC-GNHM; Sichuan, env. Xichang, 1600 m, 28.VII.1996, leg. S. Kurbatov, 4  $\circ$  in MHNG.

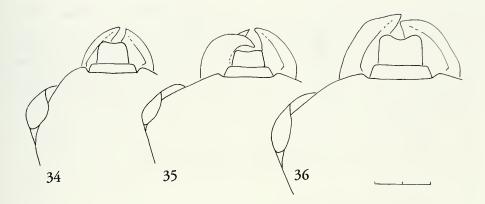
Length 2,5-3,2 mm (holotype  $3^{\circ}$  2,90 mm). Dorsum reddish-brown; venter reddish-brown, mesosternum lighter; antennae uniformly testaceous; legs reddish-brown. Microreticulation present only in traces at sides of pronotum and on the elytra; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Punctures very small, superficial, separated from each other by 1-10 times their own diameter. Widest at the eyes; eyes flattened (fig. 6); antero-lateral margins uniformly raised; clypeus moderately emarginate; clypeal line absent. 3rd antennal segment 1.7 times as long as 2nd and longer than 4th + 5th together.

Pronotum: Microreticulation present only in traces at sides of pronotum; puncturation as that of head. 1,37 times as broad as head, moderately broader than long (width/length= 1,45) and very convex (width/height= 1,42); anterior margin weakly curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 0,93 mm, width 1,35 mm and height 0,95 mm.

Elytra: Microreticulation present only in traces; punctures as those on head, separated from each other by 10-15 times their own diameter: slightly narrower than the pronotum, little longer than broad (width/length= 0,94) and weakly convex (width/height= 1,73); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,32 mm, width 1,25 mm and height 0,72 mm.

Metathoracic wings absent. Meso- and metasternum: median carina sharp, lateral lines absent, femoral lines complete, rounded at middle.



FIGs 34-36

Head of: 34, Agathidium xilingense sp. n.; 35, A. kurbatovianum sp. n.; 36, A. megacephalum sp. n.

Legs: Male hind femora with a sharp tooth at the posterior margin (fig.21). Tarsal formula:  $\eth$  5-5-4,  $\Im$  5-4-4.

Aedeagus as in figures 31, 32. Spermatheca as in figure 33.

Discussion: See *Agathidium luojiense* sp. n.; from *A. huaense* Ang. & Dmz (from Shaanxi) it differs in shape of tooth of male hind femora, in shape of aedeagus, in the greater length ratio 3rd/2nd antennal segments and width ratio pronotum/head.

Distribution: China (Sichuan).

#### Agathidium (Microceble) xilingense sp. n.

Figs 22, 34, 37, 38

Holotype  $\mathring{\sigma}$ : China, Sichuan, Mt. Xiling, 1600-2400 m, 30. VII.-4.<br/>VIII.1996, leg. S. Kurbatov, in MHNG.

Paratypes: Same data as holotype, 1  $\circ$  in MHNG, 1  $\circ$  in AC-GNHM.

Length 2,2-2,3 mm (holotype  $3^{\circ}$  2,3 mm). Dorsum reddish-brown; mesosternum testaceous, metasternum reddish-brown; antennae testaceous but with segments 9-10 darker; legs reddish-brown. Microreticulation almost absent, present only in traces on the pronotum and elytra; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Microreticulation absent; punctures small, impressed, separated from each other by 5-8 times their own diameter. Eyes hemispherical, head widest at the eyes (fig 34); antero-lateral margins distinctly raised; clypeus weakly emarginate, with a weakly impressed short groove and small pit either side. 3rd antennal segment 1,6 times longer than 2nd and as long as the 4th + 5th together.

Pronotum: Microreticulation almost absent, present only in traces; punctures larger than those of the head but more clearly impressed, separated from each other by 5-10 times their own diameter. 1,75 times as broad as head, moderately broader than long (width/length= 1,55) and moderately convex (width/height= 1,64); anterior margin

weakly curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 0,72 mm, width 1,12 mm and height 0,68 mm.

Elytra: Microreticulation almost absent, present only in traces; punctures similar to that of the pronotum but more superficial, separated from each other by 10-15 times their own diameter. Slightly narrower than the pronotum, as broad as long and moderately convex (width/height= 1,77); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,10 mm, width 1,10 mm and height 0,62 mm.

Metathoracic wings present. Meso- and metasternum: median carina sharp, lateral lines absent, femoral lines incomplete, rounded at middle.

Legs: Male hind femora rounded at posterior margin (fig.22). Tarsal formula:  $\delta$  5-5-4,  $\Im$  unknown.

Aedeagus as in figures 37, 38.

Discussion: Species of the *andrewesi* group; *Agathidium xilingense* sp. n. is similar to *A. venustum* Ang. & Dmz (from Taiwan, Guangxi, Hong Kong, Shaanxi) and *A. taiwanense* Ang. & Dmz. (from Taiwan); it differs in greater length ratio 3rd/2nd antennal segment, the less body length and in less width ratio pronotum/head and aedeagus.

Distribution: China (Sichuan).

## Agathidium (Macroceble) kurbatovianum sp. n. Figs 23, 35, 39-41

Holotype ♂: China, Sichuan, Xichang, M. Luoji, 2300-2500 m, 16.-24.VII.1996, leg. S. Kurbatov, in MHNG.

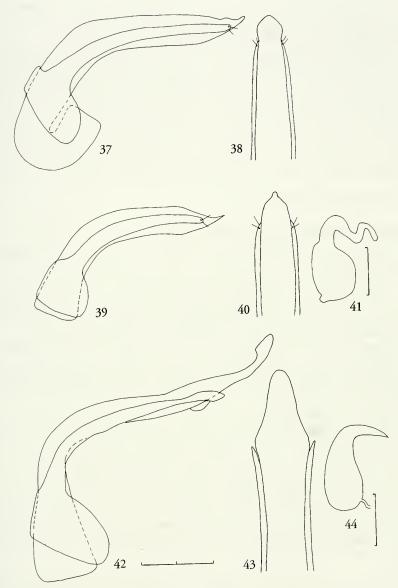
Paratypes: Same data as holotype, 3  $\, \mathbb { Q } \,$  in MHNG, 1  $\, \mathbb { d } \,$  and 1  $\, \mathbb { Q } \,$  in AC-GNHM.

Length 2,60-2,75 mm (holotype  $\delta$  2,65 mm). Dorsum dark reddish-brown, venter lighter; antennae testaceous but antennal club darker; legs reddish-brown. Microreticulation absent; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Punctures very small, superficial, separated from each other by 2-8 times their own diameter. Widest at the eyes; eyes slightly flattened (fig. 35); antero-lateral margins uniformly raised; clypeus slightly emarginate; clypeal line absent; left mandible with a tooth. 3rd antennal segment 1,09 times as long as 2nd and shorter than 4th + 5th together.

Pronotum: Microreticulation absent; punctures smaller and more superficial than those on the head, hardly visible, separated from each other by 2-15 times their own diameter. 1,46 times as broad as head, weakly broader than long (width/length= 1,14) and very convex (width/height= 1,34); anterior margin moderately curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 1,00 mm, width 1,14 mm and height 0,85 mm.

Elytra: Puncturation as that of pronotum. As broad as pronotum, a little broader than long (width/length= 1,07) and weakly convex (width/height= 1,9); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,10 mm, width 1,18 mm and height 0.62 mm.



FIGS 37-44

Aedeagus (lateral and dorsal view of its apex) of: 37-38, *Agathidium xilingense* sp. n.; 39-40, *A. kurbatovianum* sp. n.; 42-43, *A. megacephalum* sp. n. – Spermatheca of: 41, *Agathidium kurbatovianum* sp. n.; 44, *A. megacephalum* sp. n.

Metathoracic wings absent. Meso- and metasternum: median carina weak, lateral lines absent, femoral lines absent, a small tubercle present between the metacoxae; metasternum short, meso- and metacoxae almost touching. Legs: Male hind femora curved at posterior margin (fig.23). Tarsal formula:  $\circ$  5-5-4,  $\circ$  4-4-4.

Aedeagus as in figures 39, 40. Spermatheca as in figure 41.

Discussion: Agathidium kurbatovianum sp. n. is similar to A. sherpa Ang. & Dmz. (from Nepal) and A. schawalleri Ang. & Dmz. (from Nepal); it differs in lesser length ratio 3rd/2nd antennal segments; from A. schawalleri it differs also in shorter body length and in shape of the pronotum which is less transverse. From A. oblitum Ang. & Dmz. (from Taiwan) and A. narusawae Hoshina (from Ryukyus Is.) it differs in greater body length, greater width ratio pronotum/head and length ratio 3rd/2nd antennal segments. From A. megacephalum sp. n. (Sichuan) it differs in greater length ratio 3rd/2nd antennal segments and in shape of pronotum, less transverse and more convex.

Distribution: China (Sichuan).

### Agathidium (Macroceble) megacephalum sp. n.

Holotype &: China, Sichuan, Xichang, M. Luoji, 2300-2500 m, 16.-24.VII.1996, leg. S. Kurbatov, in MHNG.

Paratypes: Same data as holotype, 2  $\circ$  and 1  $\circ$  in MHNG, 1  $\circ$  and 1  $\circ$  in AC-GNHM.

Figs 24, 36, 42-44

Length 2,7-3,0 mm (holotype  $\delta$  2,90 mm). Dorsum dark reddish-brown, venter lighter; antennae testaceous with club darker; legs reddish-brown. Microreticulation absent; puncturation fine and sparse on whole dorsum. Sutural striae absent.

Head: Punctures microscopic, hardly visible, separated from each other by 2-6 times their own diameter. Widest at the eyes; eyes slightly flattened (fig. 36); anterolateral margins uniformly raised; clypeus slightly emarginate; clypeal line absent; left mandible of male with a tooth. 3rd antennal segment 0,88 times as long as 2nd and shorter than 4th + 5th together.

Pronotum: Punctures similar or smaller and more superficial than those of the head, separated from each other by 5-10 times their own diameter. 1,4 times as broad as head, slightly broader than long (width/length= 1,29) and moderately convex (width/height= 1,65); anterior margin weakly curved; lateral outline broadly rounded. Measurements of pronotum of holotype: length 1,05 mm, width 1,36 mm and height 0,82 mm.

Elytra: Punctures as those of head, separated from each other by 1-10 times their own diameter. Slightly narrower than the pronotum, as broad as long and moderately convex (width/height= 1.84); lateral outline with humeral angle very broadly rounded. Measurements of elytra of holotype: length 1,20 mm, width 1,20 mm and height 0,65 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines absent, a small tubercle present between the metacoxae; metasternum short, meso- and metacoxae almost touching.

Legs: Male hind femora curved at posterior margin (fig.24). Tarsal formula:  $\delta$  5-5-4,  $\circ$  4-4-4.

Aedeagus as in figures 42, 43. Spermatheca as in figure 44. Discussion: See *Agathidium kurbatovianum* sp. n. Distribution: China (Sichuan).

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